



SAFETY HEALTH AND
ENVIRONMENTAL AFFAIRS

SEP 17 1992

ORIGINAL

MATERIAL SAFETY DATA SHEET

PRODUCT

SOLUTION S0902 TSC-2

Emergency Telephone Number

Medical (708) 920-1510 (24 hours)

SECTION 1 PRODUCT IDENTIFICATION

TRADE NAME: SOLUTION S0902 TSC-2

DESCRIPTION: An aqueous solution of propionic acid and salt and indicator in methanol

NFPA 704M/HMIS RATING: 1/2 HEALTH 3/3 FLAMMABILITY 0/0 REACTIVITY 0 OTHER
0=Insignificant 1=Slight 2=Moderate 3=High 4=Extreme

SECTION 2 HAZARDOUS INGREDIENTS

Our hazard evaluation has identified the following chemical ingredient(s) as hazardous under OSHA's Hazard Communication Rule, 29 CFR 1910.1200. Consult Section 14 for the nature of the hazard(s).

INGREDIENT(S)	CAS #	APPROX. %
Propionic acid	79-09-4	1-5
Sodium propionate	137-40-6	1-5
Methanol	67-56-1	40-70

SECTION 3 PRECAUTIONARY LABEL INFORMATION

WARNING: Contains methanol; may be fatal or cause blindness if swallowed. Flammable. Keep undiluted solution away from heat, sparks or flame. Avoid contact with skin, eyes and clothing. Avoid breathing vapors. Do not take internally.

SECTION 4 FIRST AID INFORMATION

EYES: Flush with water for 15 minutes. Call a physician.
SKIN: Wash thoroughly with soap and rinse with water. Call a physician.
INGESTION: Induce vomiting. Give water. Call a physician.
INHALATION: Remove to fresh air. Treat symptoms. Call a physician.

NOTE TO PHYSICIAN: Based on the individual reactions of the patient, the physician's judgment should be used to control symptoms and clinical condition.

CAUTION: If unconscious, having trouble breathing or in convulsions, do not induce vomiting or give water.

SECTION 5 HEALTH EFFECTS INFORMATION

PRIMARY ROUTE(S) OF EXPOSURE: Eye, Skin, Inhalation



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SECTION 5 HEALTH EFFECTS INFORMATION

(CONTINUED)

EYE CONTACT: Can cause moderate irritation.
SKIN CONTACT: Can cause moderate irritation.
INGESTION: Can cause blindness from methanol.
Can be harmful or fatal.
INHALATION: Prolonged inhalation of mist or vapor may cause
nausea, dizziness, light-headedness, vomiting or
unconsciousness depending on the length of exposure
and the first aid action given.

SYMPTOMS OF EXPOSURE: A review of available data does not identify any
symptoms from exposure not previously mentioned.

AGGRAVATION OF EXISTING CONDITIONS: A review of available data does
not identify any worsening of existing conditions.

SECTION 6 TOXICOLOGY INFORMATION

ACUTE TOXICITY STUDIES: Acute toxicity studies have not been conducted on this
product, but toxicity studies of the ingredient(s) in Section 2 have been
reviewed. The results are shown below.

ACUTE ORAL TOXICITY (ALBINO RATS):

Methanol LD₅₀ = 5,628 mg/kg

ACUTE DERMAL TOXICITY (ALBINO RABBITS):

Methanol LD₅₀ = 20 gm/kg

ACUTE INHALATION TOXICITY (ALBINO RATS):

Methanol LC₅₀ = 64,000 ppm (8-hours)

PRIMARY SKIN IRRITATION TEST (ALBINO RABBITS):

COMMENTS: 24-hour contact with 500 mg of methanol produced moderate irritation.

PRIMARY EYE IRRITATION TEST (ALBINO RABBITS):

COMMENTS: 40 mg of methanol produced moderate irritation.

SECTION 7 PHYSICAL AND CHEMICAL PROPERTIES

COLOR: Yellow/amber	FORM: Liquid	ODOR: Alcohol
FLASH POINT:	76 Degrees F (PMCC)	ASTM D-93

NOTE: These physical properties are typical values for this product.



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SECTION 8 FIRE AND EXPLOSION INFORMATION

FLASH POINT: 76 Degrees F (PMCC) ASTM D-93

EXTINGUISHING MEDIA: Based on the NFPA guide, use dry chemical, foam, carbon dioxide or other extinguishing agent suitable for Class B fires. Use water to cool containers exposed to fire. For large fires, use water spray or fog, thoroughly drenching the burning material.

SECTION 9 REACTIVITY INFORMATION

INCOMPATIBILITY: Avoid contact with strong oxidizers (eg. chlorine, peroxides, chromates, nitric acid, perchlorates, concentrated oxygen, permanganates) which can generate heat, fires, explosions and the release of toxic fumes.

THERMAL DECOMPOSITION PRODUCTS: In the event of combustion CO, CO₂ may be formed. Do not breathe smoke or fumes. Wear suitable protective equipment.

SECTION 10 PERSONAL PROTECTION EQUIPMENT

RESPIRATORY PROTECTION: Respiratory protection is not normally needed.

VENTILATION: General ventilation is recommended. Additionally, local exhaust ventilation is recommended where vapors, mists or aerosols may be released.

PROTECTIVE EQUIPMENT: Wear gloves and safety glasses.

SECTION 11 SPILL AND DISPOSAL INFORMATION

IN CASE OF TRANSPORTATION ACCIDENTS, CALL THE FOLLOWING 24-HOUR TELEPHONE NUMBER (708-920-1510)

SPILL CONTROL AND RECOVERY:

Small liquid spills: Contain with absorbent material, such as clay, soil or any commercially available absorbent. Combine with ignitable plant wastes.

Keep the spill away from heat, sparks, flames and welding operations.

DISPOSAL: If this product becomes a waste, it meets the criteria of a hazardous waste as defined under the Resources Conservation and Recovery Act (RCRA) 40 CFR 261. Hazardous Waste D001.

Combine with other plant ignitable wastes for disposal. Can be incinerated in accordance with local, state and federal regulations.



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SECTION 11 SPILL AND DISPOSAL INFORMATION

(CONTINUED)

Empty product containers should be punctured, if plastic, and placed in the garbage collection containers.

SECTION 12 ENVIRONMENTAL INFORMATION

If released into the environment, see CERCLA in Section 14.

SECTION 13 TRANSPORTATION INFORMATION

DOT PROPER SHIPPING NAME/HAZARD CODE - FLAMMABLE LIQUID, N.O.S.
FLAMMABLE LIQUID UN 1993
CONTAINS - METHANOL

SECTION 14 REGULATORY INFORMATION

The following regulations apply to this product.

FEDERAL REGULATIONS:

OSHA'S HAZARD COMMUNICATION RULE, 29 CFR 1910.1200:

Based on our hazard evaluation, the following ingredient in this product are hazardous and the reasons are shown below.

Propionic acid - irritant
Sodium propionate - Irritant
Methanol - Flammable

Methanol = TWA 200 ppm, STEL 250 ppm (skin) ACGIH/TLV
262 mg/m³, 328 mg/m³ ACGIH/TLV

Methanol = TWA 200 ppm, STEL 250 ppm (skin) OSHA/PEL
260 mg/m³, 310 mg/m³ OSHA/PEL

CERCLA/SUPERFUND, 40 CFR 117, 302:

This product contains methanol, a Reportable Quantity (RQ) substance and if 10,000 pounds of product are released, it requires notification to the NATIONAL RESPONSE CENTER, WASHINGTON, D. C. (1-800-424-8802).

SARA/SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986
(TITLE III) - SECTIONS 302, 311, 312 AND 313:

SECTION 302 - EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355):

This product does not contain ingredients listed in Appendix A and B as an Extremely Hazardous Substance.



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SECTION 14 REGULATORY INFORMATION

(CONTINUED)

SECTIONS 311 and 312 - MATERIAL SAFETY DATA SHEET REQUIREMENTS (40 CFR 370):
Our hazard evaluation has found this product to be hazardous. The product should be reported under the following EPA hazard categories:

XX Immediate (acute) health hazard
-- Delayed (chronic) health hazard
XX Fire hazard
-- Sudden release of pressure hazard
-- Reactive hazard

SECTION 313 - LIST OF TOXIC CHEMICALS (40 CFR 372):
This product contains the following ingredient(s), (with CAS # and % range) which appear(s) on the List of Toxic Chemicals.

Methanol	67-56-1	40-70
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TOXIC SUBSTANCES CONTROL ACT (TSCA):
This product contains a substance not found on the 8(b) Inventory List and can only be used under the 5(h)(3) Research Exemption for research, development and analysis.

RESOURCE CONSERVATION AND RECOVERY ACT (RCRA), 40 CFR 261 SUBPART C & D:
Consult Section 11 for RCRA classification.

FEDERAL WATER POLLUTION CONTROL ACT, CLEAN WATER ACT, 40 CFR 401.15 (formerly Sec. 307), 40 CFR 116 (formerly Sec. 311):
None of the ingredients are specifically listed.

CLEAN AIR ACT, 40 CFR 60, SECTION 111, 40 CFR 61, SECTION 112:
This product contains the following ingredients covered by the Clean Air Act:

Methanol - Section 111

STATE REGULATIONS:

CALIFORNIA PROPOSITION 65:
This product does not contain any chemicals which require warning under California Proposition 65.

MICHIGAN CRITICAL MATERIALS:
This product does not contain ingredients listed on the Michigan Critical Materials Register.



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SECTION 14 REGULATORY INFORMATION

(CONTINUED)

STATE RIGHT TO KNOW LAWS:

Regulated in those states using the TLV for methanol as a criteria for listing.

SECTION 15 ADDITIONAL INFORMATION

None

SECTION 16 USER'S RESPONSIBILITY

This product material safety data sheet provides health and safety information. The product is to be used in applications consistent with our product literature. Individuals handling this product should be informed of the recommended safety precautions and should have access to this information. For any other uses, exposures should be evaluated so that appropriate handling practices and training programs can be established to ensure safe workplace operations. Please consult your local sales representative for any further information.

SECTION 17 BIBLIOGRAPHY

ANNUAL REPORT ON CARCINOGENS, U.S. Department of Health and Human Services, Public Health Service, PB 33-135855, 1983.

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CHEMICAL HAZARDS OF THE WORKPLACE, Proctor, N. H., and Hughes, J. P., eds., J. P. Lipincott Company, N.Y., 1981.

DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS, Sax, N. Irving, ed., Van Nostrand Reinhold Company, N.Y., 6th edition, 1984.

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(CONTINUED)

Title 29 Code of Federal Regulations Part 1910, Subpart Z, Toxic and Hazardous Substances, Occupational Safety and Health Administration (OSHA).

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